

CHICAGO

Electric® Power Tools

19.2V 3/8" CORDLESS DRILL/DRIVER

Model 66127

SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools®.
3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

SAVE THIS MANUAL

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

General Power Tool Safety Warnings



WARNING Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your battery-operated (cordless) power tool.

1. **Work area safety**
 - a. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
 - b. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
 - c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
 - d. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

2. Personal safety

- a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b. **Use personal protective equipment. Always wear eye protection.** *Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*
- d. **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- e. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
- f. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of these devices can reduce dust-related hazards.*
- g. **Only use safety equipment that has been approved by an appropri-**

ate standards agency. *Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.*

3. Power tool use and care

- a. **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b. **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c. **Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*

- f. **Use the power tool and tool bits in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*
4. **Battery tool use and care**
- a. **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*
 - b. **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
 - c. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** *Shorting the battery terminals together may cause burns or a fire.*
 - d. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** *Liquid ejected from the battery may cause irritation or burns.*
 - e. **Always switch to a fresh Battery Pack when tool performance begins to diminish.** *Severe heat is destructive to a Battery Pack. The more heat generated, the faster the Battery Pack loses power. A Battery Pack that gets too hot can be permanently damaged. Never over-discharge a Battery Pack by using the tool while*

tool performance is decreasing. When tool performance begins to diminish, stop the tool, recharge the Battery Pack, and use the fresh Battery Pack for optimal performance.

5. **Service**

- a. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

Drill Safety Warnings

1. **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** *Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.*
2. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
3. Avoid unintentional starting. Prepare to begin work before turning on the tool.
4. Do not lay the tool down until it has come to a complete stop. Moving parts can grab the surface and pull the tool out of your control.
5. When using a handheld power tool, maintain a firm grip on the tool with both hands to resist starting torque.
6. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.

7.



The battery charger gets hot during use. The charger's heat can build up to unsafe levels and create a fire hazard if it does not receive adequate ventilation, due to an electrical fault, or if it is used in a hot environment.

Do not place the charger on a flammable surface. Do not obstruct any vents on the charger. **Especially avoid placing the charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the charger.**

Place the charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the charger and battery during use.

8. This product is not a toy. Keep it out of reach of children.

9. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:

- Avoid operating alone.
- Do not use with power switch locked on.
- Properly maintain and inspect to avoid electrical shock.
- Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.

10. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

11. **WARNING:** Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, *et seq.*)

12. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to

vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:



**SAVE THESE
INSTRUCTIONS.**

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice between different processes.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

SPECIFICATIONS

Charger Input	120V, 60 Hz,
Power Output	19.2 VDC NiCd Battery, 1.7 aH
Drill Speed	0 - 600 RPM Forward/Reverse
Chuck Type	3/8" Keyless
Torque Settings	15 Standard Setting + One Drill Setting
Trigger Settings	Forward/Reverse

UNPACKING

When unpacking, make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

INSTRUCTIONS FOR PUTTING INTO USE



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

WARNING TO PREVENT SERIOUS INJURY

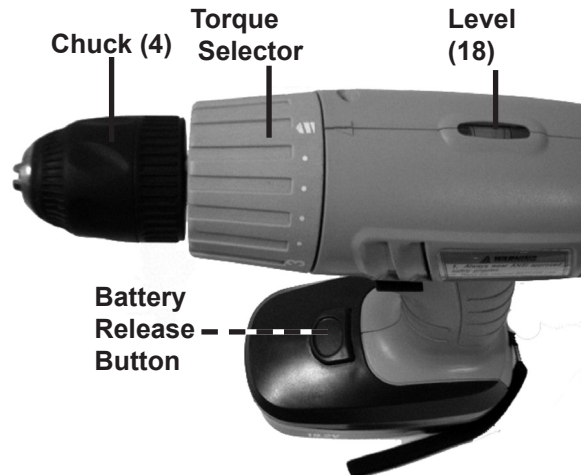
FROM ACCIDENTAL OPERATION:

Turn the **Forward/Reverse Switch** of the tool to its center, locked position and remove the **Battery** before assembling or making any adjustments to the tool.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Charging the Battery

1. The Battery Pack (15) must be charged for three to five hours before use. Do not charge the Battery Pack longer than five hours; the Battery Pack and/or Charger (21) may be damaged. Do not leave the Charger unattended while charging. Charge the Battery on a inflammable surface.
2. Move the Forward/Reverse Switch of the Drill to its center, locked position.
3. Push the Battery Release Button on top of the Battery down, and slide the Battery off the handle of the Drill.



4. Slide the Battery onto the Charger. Plug the Charger into a grounded 120 volt electrical outlet.
5. Verify that the charging indicator light comes on. If it does not come on, check the power cord connection. Charge the Battery until the charging indicator light turns off.

Note: While charging, the Battery and Charger may become warm to the touch. This is normal, and does not indicate a problem.

6. Once the Battery is charged, disconnect the Charger from the electrical outlet and the Charger from the Battery Pack. Connect the Battery to the base of the Drill.

Installing a Drill Bit

1. Turn the Chuck (4) of the Drill counterclockwise until the jaws are open wide enough to receive a 3/8" bit.
2. Place the bit of a driver or drill (not included) into the jaws, and turn the Chuck clockwise until secure.

OPERATING INSTRUCTIONS



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.




TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:
Turn the Forward/Reverse Switch of the tool to its center, locked position and remove the Battery before performing any inspection, maintenance, or cleaning procedures.

Work Piece and Work Area Set Up

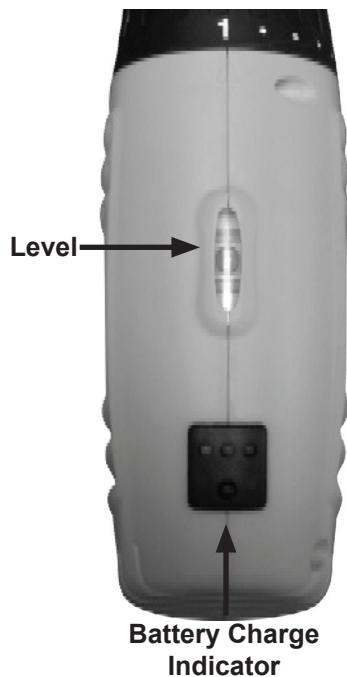
1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent injury and distraction.
2. Secure loose work pieces using a vise or clamps (not included) to prevent movement while working.

3. There must not be hazardous objects, such as utility lines or foreign objects, nearby that will present a hazard while working.
4.  **Warning, to prevent serious injury;** verify that the surface has no hidden utility lines before drilling or driving screws.

General Operating Instructions

1. Mark the position of the hole to be drilled with a center punch to prevent the Drill from "walking".
2. Attach the Battery to the bottom of the handle, it will click when it locks into place.
3. Move the Forward/Reverse Switch to the desired position.
4. Turn the Torque Selector to the correct torque setting. Do not change the torque setting while the drill is moving.
5. Pull the Trigger to start the Drill. Allow the drill to come up to full speed, before, applying it to the work surface.
6. Hold the Drill firmly with both hands, as torque will cause the tool to twist.
7. When drilling in light gauge metal or wood, place a wooden block behind the material to prevent damage to the workpiece. Lubricate the Drill Bit with cutting oil when drilling iron or steel. Use a coolant when drilling nonferrous metals such as copper, brass, or aluminum.
8. To drill holes parallel to the ground, make sure the bubble stays between the lines on the Level.

9. To determine the battery charge level, hold down the Battery Charge Indicator. There are three lights (red, yellow, green), if all three are lit the battery is fully charged. If only the red and yellow lights are illuminated, the battery is partially charged. If only the red light is illuminated, then the battery will need to be charged soon.



10. When the hole is drilled, remove the drill bit from the hole while the Drill is still running. This prevents the Drill Bit from getting caught in the hole and causing damage.
11. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.

MAINTENANCE AND SERVICING



Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠️ WARNING

TO PREVENT SERIOUS INJURY

FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool to its “OFF” position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE**, inspect the general condition of the tool. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
2. **AFTER USE**, clean external surfaces of the tool with clean cloth.
3. **⚠️ WARNING!** If the supply cord of this power tool is damaged, it must

be replaced only by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

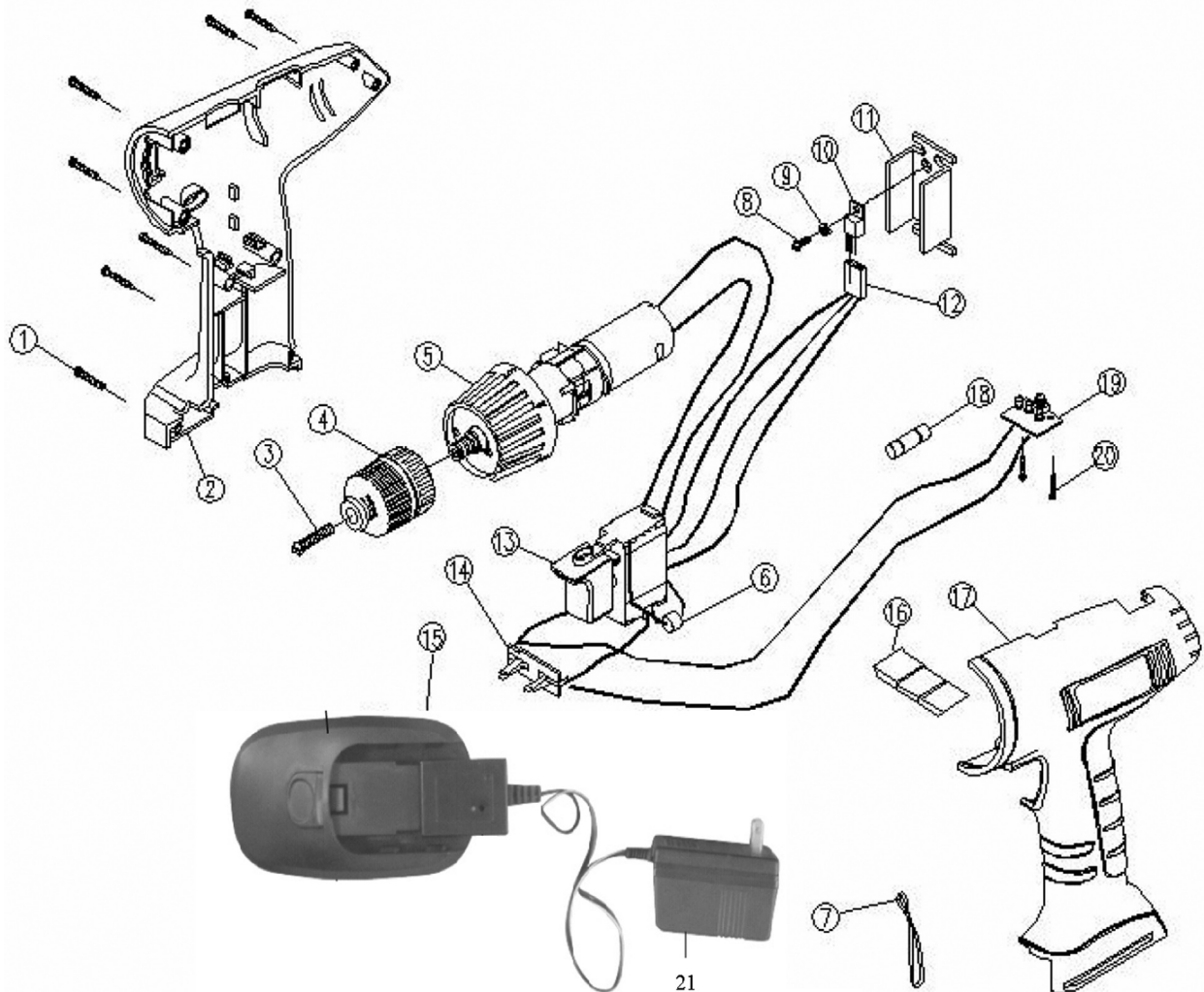
PARTS LIST

Part	Description	Qty
1	Screw	8
2	Right Body	1
3	Chuck Screw	1
4	Chuck	1
5	Gear Box & Motor Assembly	1
6	Capacitor	1
7	Handle Belt	1
8	Screw	1
9	Washer	1
10	VMOS	1
11	Cooling Plate	1

PARTS LIST

Part	Description	Qty
12	Connector	1
13	Trigger	1
14	Battery Clamp	1
15	Battery	1
16	Reverse Lever	1
17	Left Body	1
18	Level	1
19	Circuit Board	1
20	Screw	2
21	Charger	1
22	Case (not shown)	1

ASSEMBLY DIAGRAM



Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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